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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,530	11/06/2003	Chiou-Hwang Lee	LEEC3077/EM	8133

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EXAMINER
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NGUYEN, CAM N

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/701,530

Applicant(s)

LEE ET AL.

Examiner

Cam N. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03/27/06 (an amendment/response).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 11-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on originally filed is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### **Response to Amendment**

1. Applicants' amendment and remarks, filed March 27, 2006, has been made of record and entered. Claims 1 & 3 have been amended. Claims 11-13 have been added.

Claims 1-4 & 11-13 are currently pending and under consideration.

### **Claim Rejections - 35 USC § 103**

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-4 & 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tennent et al., "hereinafter Tennent", (US Pat. 4,892,857).

Tennent discloses an apparatus (or a composition), which is consisting essentially of: (a) a substrate selected from the group including ceramic material; (b) a first layer, and (c) a second metal-containing layer superposed on said first layer, etc. (see col. 11, claim 1). The second metal-containing layer consists essentially of elements selected from a group including Pt and Re (see col. 11, claim 2). See also col. 12, claims 12-14. The substrate has a composition, which consists essentially of metal oxides including 22 to 30 weight %  $\text{Al}_2\text{O}_3$ , 2.1 to 13.5 weight %  $\text{MgO}$ , 0 to 11.9 weight %  $\text{CuO}$ , and 0 to 12.1 weight %  $\text{ZnO}$  (see col. 12, claim 5).

Regarding claims 1, 3-4, & 11-13, the difference between the claimed catalyst and that disclosed by Tennent, is that Tennent does not disclose the Pt and Re amounts. It would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made to have predetermined optimum amounts of Pt and Re to result in an effective catalyst because it is a result effective variable and since it involves only routine experimentation of one having the ordinary skill in the art to do so, and in view of *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 2 & 11, Tennent does not disclose the claimed copper concentration. It would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made to have optimized the copper concentration of Tennent to result in an effective catalyst material because of *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

**Response to Applicants' Arguments**

4. Applicants' response, filed on March 27, 2006, to the office action dated 12/27/05 has been fully considered, but not deemed persuasive for the following reasons.

First, applicants urged that "the use of the Tennent's apparatus is remarkably different from the use of the catalyst of claim 1 of the present application..., which would be impermissible hindsight, to make the necessary modifications to arrive at the presently claimed invention" (applicants' response on page 5, 4<sup>th</sup> paragraph) is noted. This is not found persuasive because the instant claims are drawn to a product (a catalyst) and not a process of use. It is considered the intended use as set forth in the preamble of the instant claims have no bearing on the patentability of the claimed catalyst since the claimed catalyst limitations do not depend on the intended use limitations for completeness or it changes the structure or composition of the claimed catalyst. The catalyst limitations are able to stand alone, see MPEP 2111.02 and 2114. See also In re Pearson, 181 USPQ 641 & In re Thrau, 57 USPQ 324.

Second, applicants urged that "the first layer" and "second metal-containing layer superposed on the first layer" of claim 1 of Tennent are absent in the present invention (applicants' response on page 5, last paragraph thru page 6, first paragraph) is also noted. This is not found persuasive because the additional first and second metal-containing layers of disclosed in the Tennent reference are not being excluded from the instantly claimed catalyst due to the open-ended phrase "comprising" or "comprises" in the preamble of the instant claims. However, the examiner does not see any difference in the claimed catalyst structure and that disclosed by Tennent since both applicants'

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catalyst and Tennent's catalyst contain a carrier or a substrate having a metal-containing layer or supported on the carrier with the platinum group metals.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**Conclusion**

6. Claims 1-4 & 11-13 are pending. Claims 1-4 & 11-13 are rejected. No claims are allowed.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone number is 571-272-1357. The examiner can normally be reached on M, W, R, & F, 9:00 AM - 6:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen/cnn  
June 08, 2006

  
CAM N. NGUYEN  
PRIMARY EXAMINER

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